

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

Complete if Known Substitute for form 1449A/PTO **Application Number** 10/044,522 INFORMATION DISCLOSURE Filing Date January 11, 2002 Stanley S. Toncich STATEMENT BY APPLICANT First Named Inventor Art Unit (use as many sheets as necessary) To Be Assigned Examiner Name Sheet of Attorney Docket Number UTL 00191

			U.S. PATE	ENT DOCUMENTS	
Examiner Initials		Document Number Number- Kind Code ² (if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
m	1	US- 5,729,239	03-17-1998	Rao, Jaganmohan B.L.	
156	2	US- 6,049,726	04-11-2000	Gruenwald, Werner, et al.	
	3	US- 6,160,524	12-12-2000	Wilber, William	
li	4	US- 6,198,441 B1	03-06-2001	Okabe, Hiroshi	
	5	us- 6,028,561	02-22-2000	Takei, Ken	
	6	us- 5,973,567	10-26-1999	Heal, Mark D., et al.	<u> </u>
	7	US- 4,475,108	10-02-1984	Moser, Kenneth R.	Abstract, Fig. 1
	8	us- 3,678,305	07-18-1972	George, Edward	
li	9	us- 3,918,012	11-04-1975	Peuzin, Jean Claude	
	10	us- 5,450,092	09-12-1995	Das, Satyendranath	
	11	us- 6,333,719 B1	12-25-2001	Varadan, Vijay K.	
	12	US- 5,212,463	05-18-1993	Babbitt, Richard W., et al.	
	13	us- 4,733,328	03-22-1988	Blazej, Daniel C	
	14	us- 5,617,104	04-01-1997	Das, Satyendranath	
	15	US- 5,307,033	04-26-1994	Koscica, Thomas E., el al.	
	16	US- 5,427,988	06-27-1995	Sengupta, Louise, et al.	
	17	Us- 5,557,286	09-17-1996	Varadan, Vijay K., et al.	
	18	us- 5,561,407	10-01-1996	Koscica, Thomas E., el al.	
	19	US- 5,589,845	12-31-1996	Yandrofski, Robert M.	*
$\alpha \dot{\alpha}$	20	US- 5,496,795	03-05-1996	Das, Satyendranath	

11		FORE	IGN PATENT D	OCUMENTS		
Examiner Initials	Cite No. [†]	Foreign Patent Document Country Code3 - Number4 - Kind Code5 (f known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τe
2	21 22 23 24 25 26 27 28 29 30	WO 00/62367 JP 29-05-00 2001338839 EP 0 637 131 A1 EP 0 843 374 A2 EP 0 638 953 A1 WO 00/35042 EP 0 680 108 A1 EP 0 881 700 A1 WO 00/28613 DE 40 36 866 A1	10-19-2000 07-12-2001 02-01-1995 05-20-1998 02-15-1995 06-15-2000 11-02-1995 12-02-1998 05-18-2000 07-25-1991	Carlsson, Erik, et al. Tsuneo, Mishima Fujita Masanori Muller, Frithjoj E., et al. Yasuoka, et al. Sengupta, Louise, et al. Atokawa, Masayuki Atokawa, Masayuki Sengupta, Louise, et al. Yamamoto, Masaki	Abstract, Fig. 1	

Examiner Date Signature Considered

*EXAMINER: Initial if reference considered, whether or no citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Effer Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	e

Substitute for form 1449A/PTO

	•					
Complete if Known						
Application Number	10/044,522					
Filing Date	January 11, 2002					
First Named Inventor	Stanley S. Toncich					
Art Unit	2817					
Examiner Name	To Be Assigned					
Attorney Docket Number	UTL 00191					

Name of Patentee or Applicant of Cited Document Pages, Columns, Lines, Where Relevant Passages or Relevant Figures, Appear				U.S. PATE	ENT DOCUMENTS	
32 us. 5,987,314 11-16-1999 Salto, Atsushi 33 us. 5,472,935 12-5-1995 Yandrofski, Robert, et al. 34 us. 4,799,066 01-17-1989 Deacon, Malcolm J. 35 us. 5,166,857 11-24-1992 Avanic, Branko, et al. 36 us. 5,880,921 03-09-1999 Tham, J.L. Julian, et al. 37 us. 5,640,042 06-17-1997 Koscica, Thomas E., et al. 38 us. 4,835,499 05-30-1989 Pickett, Michael N. 39 us. 3,413,543 11-26-1968 Schubring, et al. 40 us. 5,945,887 08-31-1999 Makino, Toshihiro, et al. 41 us. 5,973,568 10-26-1999 Shapiro, Gary, et al. 42 us. 5,216,392 06-01-1993 Fraser, Randall S. 43 us. 3,676,803 07-11-1972 Simmons, William J. 44 us. 3,836,874 09-17-1974 Maeda, Minoru, et al. 45 us. 5,777,524 07-07-1998 Sroka, Peter, et al. 46 us. 5,777,524 07-07-1998 Wojewoda, Carl E., et al. 47 us. 6,052,036 04-18-2000 Enstrom, Hakan, et al.			Number - Kind Code ² (if known			Relevant Passages or Relevant
	m 200	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	US. 6,097,263 US. 5,987,314 US. 5,472,935 US. 4,799,066 US. 5,166,857 US. 5,880,921 US. 5,640,042 US. 4,835,499 US. 3,413,543 US. 5,945,887 US. 5,973,568 US. 5,216,392 US. 3,676,803 US. 3,836,874 US. 5,778,308 US. 5,777,524 US. 6,052,036 US. 6,292,143 B1	08-01-2000 11-16-1999 12-5-1995 01-17-1989 11-24-1992 03-09-1999 06-17-1997 05-30-1989 11-26-1968 08-31-1999 10-26-1999 06-01-1993 07-11-1972 09-17-1974 07-07-1998 04-18-2000 09-18-2001	Salto, Atsushi Yandrofski, Robert, et al. Deacon, Malcolm J. Avanic, Branko, et al. Tham, J.L. Julian, et al. Koscica, Thomas E., el al. Pickett, Michael N. Schubring, et al. Makino, Toshihiro, et al. Shapiro, Gary, et al. Fraser, Randall S. Simmons, William J. Maeda, Minoru, et al. Sroka, Peter, et al. Wojewoda, Carl E., et al. Enstrom, Hakan, et al. Romanofsky, Robert R.	Abstract, Fig. 3

		FORE	IGN PATENT D	OCUMENTS		
Examiner Initials	Cite No. 1	Foreign Patent Document Country Code 3 -Number 4 - Kind Code 5 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т6
a	51	EP 1 043 741 A2	10-11-2000	Klee, Mareike, et al.		
14	52	EP 0 795 922 A1	09-17-1997	Tsuru, Teruhisa, et al.		
	53	EP 0 909 024 A2	04-14-1999	Nakamichi, et al.		
	54	WO 00/79648 A1	12-28-2000	Varadan, Vijay K., et al.		
1	55	WO 00/79645 A1	12-28-2000	Falk, Kent, et al.		
<i>(</i> }}<)	56	WO 94/13028	06-09-1994	Yandrofski, et al.	Col. 8, lines 9-26,	
V	57	Í .			Figs. 30-31; p. 14,	
	58	į			par. 4, abst.	
	59				tias. 2. 4. 11	
	60					

Examiner Date Signature Considered

*EXAMINER: Initial if reference considered, whether for not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement. This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached

PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet of

Cor	nplete if Known	
Application Number	10/044,522	
Filing Date	January 11, 2002	
First Named Inventor	Stanley S. Toncich	
Group Art Unit	2817	
Examiner Name	To Be Assigned	
Attorney Docket Number	UTL 00191	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), nublisher, city and/or country where published	T ²
Mo	61	A. Presser, "Varactor-Tunable, High-Q Microwave Filter," RCA Review, Vol. 42, Dec. 1981, pp. 691-705.	
+	62	C. Chang and T. Itoh, "Microwave Active Filters Based on Coupled Negative Resistance Method," IEEE Trans. on Microwave Theory and Techniques, Vol. 38, No. 12, Dec. 1990, pp. 1879-1884.	
	63	P. Katzin, B. Bedard, and Y. Ayasli, "Narrow-Band MMIC Filters with Automatic Tuning and Q-Factor Control," 1993 IEEE MTT-S Int. Microwave Symp. Digest pp.403-406.	
-	64	B. Hopf, I. Wolff, and M. Guglielmi, "Coplanar MMIC Active Bandpass Filters Using Negative Resistance Circuits," 1994 IEEE MTT-S Symposium Digest, pp. 1183-1185.	
	65	U. Karacaoglu and I.D. Robertson, "High Selectivity Varactor-Tuned MMIC Bandpass Filter Using Lossless Active Resonators," 1994 IEEE MTT-Symposium Digest, pp. 1191-1194.	
1	66	B. Nauta, "A CMOS Transconductance-C Filter Technique for Very High Frequencies," IEEE Journal of Solid-State Circuits, Vol. 27, No. 2, February 1992, pp. 142-153.	
	67	K Fujita, H. Itoh, R. Yamamoto, "A 15.6 GHz Commercially Based 1/8 GaAs Dynnamic Presealer," 1989 IEEE GaAs IC Symposium, pp. 113-116.	
n	66	J. Smuk, P. Katzin, "MMIC Phase Locked L-S Band Oscillators," 1994 IEEE GaAs Symposium Digest, pp. 27-29.	
1.	69	S. R. Chandler, I. C. Hunter, and J.G. Gardiner, "Active Varactor Tunable Bandpass Filter," IEEE Microwave and Guided Wave Letters, Vol. 3, No. 3, March 1993, pp. 70-71.	
	70	I. C. Hunter and John D. Rhodes, "Electronically Tunable Microwave Bandpass Filters," IEEE Trans. on MTT, Vol. 30, No. 9, September 1982, pp. 1354-1367.	
m	71	S. Toyoda, "Quarter-wavelength Coupled Variable Bandstop and Bandpass Filters Using Varactor Diodes," IEEE Trans. on Mtt, Vol. 30, No. 9, September 1982, pp. 1387-1389.	

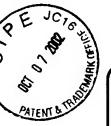
Date Examiner Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number control number



Sheet

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Cor	nplete if Known	
Application Number	10/044,522	
Filing Date	January 11, 2002	
First Named Inventor	Stanley S. Toncich	
Group Art Unit	2817	
Examiner Name	To Be Assigned	
Attorney Docket Number	UTL 00191	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. 1	tnclude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher city and/or country where published	T ²
Jr.	72	B. Yu. Kapilevich, "Variety of Approaches to Designing Microwave Active Filters," Proc. 27th European Microwave Conf., Jerusalem, Vol. 1, 1997, pp. 397-408.	
-	73	B. Yu. Kapilevich, "Understand the Operation of Channelized Active Filters," Microwaves & RF, January 1997, pp. 89-92.	
•	74	M. Dishal, "Alignment and Adjustment of Synchronously Tuned Multiple Resonator-Circuit Filters" Proc. IRE 39, November 1951, pp. 1448-1455.	
	75	S. B. Cohn, "Dissipation Loss in Multiple-Coupled-Resonator Filters," Proc. IRE 47, August 1959, pp. 1342-1348.	
	76	G. L. Matthaei, "An Electronically Tunable Up-Converter," Proc. IRE 49, November 1961, pp. 1703-1704.	
	77	E. G. Fubini and E.A. Guillemin, "Minimum Insertion Loss Filters," Proc. IRE 47, January 1959, pp. 37-41.	
	78	W.J. Getsinger, "Prototypes for Use in Broadbanding Reflection Amplifiers," IEEE Trans. PTGMTT-11, November 1963, pp. 486-497.	
1	79	E.S. Kuh and M. Fukada, "Optimum Sunthesis of Wide-Band Parametric Amplifiers and Converters," IRE Trans. PCCT-8, December 1961, pp.410-415.	
*	80	W. J. Getsinger and G.L. Matthaei, "Some Aspects of the Design of Wide-Band Up-Converters and Nondegenerate Parametric Amplifiers," IEEE Trans. PTGMTT-12, January 1964, pp. 77-87.	
	81	R. L. Sleven, "Design of a Tunable Multi-Cavity Waveguide Band-Pass Filter," 1959 IRE National Convention Record, Part 3, pp. 91-112.	
Jh	82	J.J. Taub and B. F. Bogner, "Design of Three-Resonator Dissipative Band-Pass Filters Having Minimum Insertion Loss," Proc. IRE 45, pp. 681-687 (May 1957).	
/ /			$\perp \perp !$

Examiner	(Potton	Date	2/24/03
L Signature I			i Consideredi	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through ditation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement. This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents. Washington, DC 20231. PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB



Complete if Known Substitute for form 1449B/PTO 10/044,522 **Application Number INFORMATION DISCLOSURE** January 11, 2002 Filing Date Stanley S. Toncich **First Named Inventor** STATEMENT BY APPLICANT 2817 Group Art Unit To Be Assigned (use as many sheets as necessary) Examiner Name Attorney Docket Number UTL 00191 of Sheet

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Çite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) nublisher city and/or country where published	T²
Ps	83	K.L. Kotzebue, "Broadband Electronically-Tunable Microwave Filters," 1960 IRE Wescon Convention Record, Part 1, pp.21-27.	
	84	J.P. Louhos and I. Pankinaho, "Electrical Tuning of Integrated Mobile Phone Antennas," Nokia Mobile Phones, pp. 69- 97 (September 15, 1999).	
	85	P. K. Panayi, M. Al-Nuaimi, and L. P. Ivrissimtzis, "Tuning Techniques for the Planar Inverted-F Antenna," National Conference on Antennas and Propagation Publication, No. 461, pp. 259-262 (April 1999).	İ
	86	Satoshi Makioka, et al., "A High Efficiency GaAs MCM Power Amplifier for 1.9 GHz Digital Cordless Telephones," IEEE 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium, pp. 51-54 (1994).	
1	87	V. K. Varadan, K. A. Jose, V. V. Varadan, "Design and Development of Electronically Tunable Microstrip Antennas," IOP Publishing Ltd., pp.238-242 (1999).	
	88	Communication Relating to the Results of the Partial International Search: PCT/IB 02/01077 (2002).	
	89	International Search Report: PCT/IB 02/01086 (June 24, 2002).	
	90	International Search Report: PCT/IB 02/01078 (July 10, 2002).	
	91	International Search Report: PCT/IB 02/01087 (July 19, 2002).	
	92	International Search Report: PCT/IB 02/01107 (July 11, 2002).	
	93	International Search Report: PCT/IB 02/01120 (July 11, 2002).	

Examiner Date Considered *EXAMINER. Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

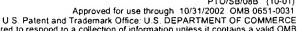
and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached

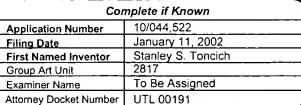
Burden Hour Statement. This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

PTO/SB/08B (10-01)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB Substitute for form 1449B/PTO

Sheet





INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)

of

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), nublisher, city and/or country where nublished.	T²
B	94	International Search Report: PCT/IB 02/01098 (July 4, 2002).	
	95	International Search Report: PCT/IB 02/01082 (July 8, 2002).	
	96	International Search Report: PCT/IB 02/01144 (July 12, 2002).	
	97	International Search Report: PCT/IB 02/01026 (June 28, 2002).	
9	98	International Search Report: PCT/IB 02/01027 (June 25, 2002).	
	99		
	100		
	101		
	102		
	103		
j	104		

Examiner Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached

Burden Hour Statement. This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

